

Notice of Allowability

Application No.

10/724,536

Examiner

JAMES S. WOZNIAK

Applicant(s)

AXELROD ET AL.

Art Unit

2626

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment after final filed on 6/10/2008.
2. ☒ The allowed claim(s) is/are 1, 3-7, and 9-14 (now claims 1-12).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Response to Amendment

1. In response to the office action from 4/11/2008, the applicant has submitted an amendment after final, filed 6/10/2008, amending independent claims 1 and 7, while arguing to traverse the art rejection based on the amended limitations (*Amendment, Pages 9-11 and 17*). Applicant's arguments have been fully considered, and in light of the amended claims and for the reasons given below, claims 1, 3-7, and 9-14 are allowable over the prior art of record.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Anne Vachon Dourherty (*Reg. No. 30,374*) on 6/25/2008.

3. The application has been amended as follows:

In claim 1, Lines 16-17, delete "(e.g. number of frames)".

In claim 1, Line 21, change "the conditional probabilities" to ~~conditional probabilities~~.

In claim 7, Lines 15-16, delete "(e.g. number of frames)".

In claim 7, Line 20, change "the conditional probabilities" to –conditional probabilities--.

Allowable Subject Matter

4. **Claims 1, 3-7, and 9-14** allowable over the prior art of record.

5. The following is an examiner's statement of reasons for allowance:

With respect to **Claims 1 and 7**, the prior art of record failed to explicitly teach or fairly suggest, either individually or in combination, a system and method for speech recognition using a plurality of speech recognition features extracted directly from an input speech signal that generates a recognition output for the unknown speech input using log-linear function formulas as defined in the aforementioned claims.

Most pertinent prior art:

Vergyri ("*Integration of Multiple Knowledge Sources in Speech Recognition Using Minimum Error Training*," 2000) evidences that performing speech recognition using a log-linear model incorporating a plurality of different speech features extracted directly from the speech signal (*as defined by the applicant, see Prior OA, Page 3*) is well known in the speech recognition art (*Pages 100-101*). The difference between Vergyri and the applicants' claimed invention are the formulas used in the log-linear function. As can be seen on Pages 100-101, Vergyri's log-linear function is not the same as that claimed by the applicants.

Thus, the prior art of record fails to explicitly teach or fairly suggest the invention recited in claims 1 and 7.

Dependent claims 3-6 and 9-14 further limit independent claims containing allowable subject matter, and thus, are also allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached at (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/James S. Wozniak/
Patent Examiner, Art Unit 2626